ABSTRACT

A time series data dimensional compression apparatus performing dimensional compression for improving the efficiency of searching for time series data without losing the features of data. The compression is made to a determined dimension so that a larger volume of information may be extracted therein. A time series subsequence generating section (112) generates time series subsequences of a specified segment width into which a plurality of pieces of time series data generated at a time series data generating section (110) are divided. A singular value decomposition processing section (113) performs singular value decomposition on all of the time series subsequences. A dimensional compression time series data generating section (114) generates dimensional compression time series data by using high-order elements of the singular value decomposition as a representative value of the time series subsequence.